

CLAIMS

1. A method for accurately detecting an attitude of a moving body, the moving body including a high-accuracy attitude
5 detection mechanism having a pair of a first attitude detection section for detecting the attitude of the moving body and a second attitude detection section which provides an output inverted from that of the first attitude detection section,

the method comprising the steps of:

10 performing arithmetic processing which mutually compensates for a variation in the output of both of the attitude detection section, and

accurately detecting the attitude information of the moving body.

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2. The method for accurately detecting an attitude of a moving body according to claim 1, wherein

the moving body includes a control arithmetic processing mechanism for detecting the attitude of the moving body by using
20 the output of the attitude detection section as an input signal, and

the attitude detection section and the control arithmetic processing mechanism are driven by a common driving power supply.

3. Apparatus for accurately detecting an attitude of a moving body comprising:

a high-accuracy attitude detection mechanism having a pair of a first attitude detection section for detecting the attitude of the moving body and a second attitude detection section which provides an output inverted from that of the first attitude detection section,

the apparatus being capable of accurately detecting the attitude information of the moving body by incorporating into the high-accuracy attitude detection mechanism an arithmetic processing feature which mutually compensates for a variation in the output of both of the attitude detection section.

4. The apparatus for accurately detecting an attitude of a moving body according to claim 3, wherein

the attitude detection section are rate gyroscopes, a pair of rate gyroscopes forming a high-accuracy attitude detection mechanism is mounted on the moving body in opposite directions to each other, and

the attitude information of the moving body is detected by a differential signal obtained from the output signals of the rate gyroscopes.

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5. The apparatus for accurately detecting an attitude of a moving body according to claim 3, wherein

the attitude detection section are acceleration sensors,

a pair of acceleration sensors forming a high-accuracy

5 attitude detection mechanism is mounted on the moving body in opposite directions to each other, and

the attitude information of the moving body is detected by a differential signal obtained from the output signals of the acceleration sensors.

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6. The apparatus for accurately detecting an attitude of a moving body according to claim 3, wherein

the attitude detection section are inclination sensors,

a pair of inclination sensors forming a high-accuracy

15 attitude detection mechanism is mounted on the moving body in opposite directions to each other, and

the attitude information of the moving body is detected by a differential signal obtained from the output signals of the inclination sensors.

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7. The apparatus for accurately detecting an attitude of a moving body according to claim 3, wherein

the attitude detection section is formed by a pair of rate gyroscopes and a pair of acceleration sensors,

25 each of the pair of rate gyroscopes and acceleration

sensors forming a high-accuracy attitude detection mechanism is mounted on the moving body in opposite directions to each other, and

the attitude information of the moving body is detected
5 by a differential signal obtained from the differential signal of output signals of the rate gyroscopes and that of output signals of the acceleration sensors.

8. The apparatus for accurately detecting an attitude of
10 a moving body according to claim 3, wherein

the attitude detection section is formed by a pair of rate gyroscopes and a pair of inclination sensors,

each of the pair of rate gyroscopes and the pair of inclination sensors forming a high-accuracy attitude detection
15 mechanism is mounted on the moving body in opposite directions to each other, and

the attitude information of the moving body is detected by a differential signal obtained from the differential signal of output signals of the rate gyroscopes and that of output
20 signals of the inclination sensors.

9. The apparatus for accurately detecting an attitude of a moving body according to any one of claims 3 through 8, comprising:

25 at least a pair of moving body attitude detection section,

and

a control arithmetic processing mechanism for detecting the attitude of the moving body by using the output of the attitude detection section as an input signal, wherein

5 the attitude detection section and the control arithmetic processing mechanism are connected to a common driving power supply.

10. A high-accuracy attitude detection apparatus for
10 accurately detecting an attitude of a moving body according to any one of claims 3 through 9, wherein
the moving body is a walking robot.